

**DIRECT TESTIMONY OF**  
**JOHN H. RAFTERY**  
**ON BEHALF OF**  
**DOMINION ENERGY SOUTH CAROLINA, INC.**  
**DOCKET NO. 2019-184-E**

1 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND**  
2 **OCCUPATION.**

3 A. My name is John Raftery. My business address is 220 Operation Way, Cayce,  
4 South Carolina. I am the Director of Rates and Regulatory Affairs for Dominion  
5 Energy South Carolina, Inc. (“DESC” or the “Company”).<sup>1</sup>

7 **Q. STATE BRIEFLY YOUR EDUCATION, BACKGROUND, AND**  
8 **EXPERIENCE.**

9 A. I am a graduate of Northwestern University with a Bachelor of Science  
10 degree in Mechanical Engineering. I began my public utilities career in 1994 as an  
11 Information Technology Management Consultant with Price Waterhouse and  
12 continued with Oracle Corporation in 1998. I joined SCANA Corporation in 2003  
13 as a Client Manager in the Customer Systems Support Organization and gained the

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<sup>1</sup> South Carolina Electric & Gas Company (“SCE&G”) changed its name to Dominion Energy South Carolina, Inc. in April 2019, as a result of the acquisition of SCANA Corporation by Dominion Energy, Inc. For consistency, I use “DESC” to refer to the Company both before and after this name change.

1 responsibilities of the Customer Service Training Department several years later. In  
2 2010, I assumed responsibility for the SCANA Contact Centers and Technology  
3 Services, with the addition of SCE&G's Business Offices in 2013. In 2014, I  
4 became General Manager of Renewable Products/Services and Energy Demand  
5 Management. Following the business combination of SCANA Corporation and  
6 Dominion Energy, Inc., I became Director of Rates and Regulatory Affairs in March  
7 2019.

8  
9 **Q. HAVE YOU EVER TESTIFIED BEFORE THE PUBLIC SERVICE**  
10 **COMMISSION OF SOUTH CAROLINA ("COMMISSION")?**

11 A. Yes. I have testified in a number of different proceedings before this  
12 Commission.

13  
14 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

15 A. Earlier this year, the South Carolina General Assembly enacted Act No. 62,  
16 which, among other things, added Chapter 41 to Title 58 regarding renewable  
17 energy programs. Pursuant to Section 58-41-20(A) of the act, the Commission is  
18 required to establish each electrical utility's standard offer, avoided cost  
19 methodologies, form contract power purchase agreements ("PPAs"), commitment  
20 to sell forms, and any other terms or conditions necessary to implement this section.  
21 In compliance with this requirement, the Commission opened Docket No. 2019-  
22 184-E to consider these issues for DESC. The purpose of my testimony is to provide

1 the Commission with background information regarding Act No. 62, including the  
2 public policy issues that formed the basis for its enactment, the requirements of  
3 Section 58-41-20(A) under consideration in this proceeding, and to support DESC's  
4 requests regarding these issues.

5  
6 **Q. WHAT OTHER WITNESSES WILL THE COMPANY PRESENT?**

7 A. The Company will present the following additional witnesses in this case:

8 **Joseph M. Lynch, Ph.D.**, Manager of Resource Planning, who will testify  
9 regarding certain analyses that support the development of the resource plan used  
10 in DESC's proposed methodology to calculate the Company's avoided costs.

11 **Mr. James W. Neely, P.E.**, Senior Resource Planning Engineer, who will testify  
12 regarding the resource plan study that describes the various generation planning  
13 scenarios analyzed by DESC. Mr. Neely also will present the resource plan which  
14 DESC proposes to use in its avoided cost methodology and will discuss DESC's  
15 avoided costs for power purchases under the Public Utility Regulatory Policies Act  
16 of 1978 ("PURPA"). Finally, Mr. Neely will discuss the 11 components contained  
17 in the net energy metering ("NEM") methodology approved by the Commission in  
18 Order No. 2015-194 issued in Docket No. 2014-246-E.

19 **Mr. Eric H. Bell, P.E.**, Manager of Economic Resource Commitment, who will  
20 discuss the actual operational experience of the Company related to managing  
21 energy supply, including the photovoltaic solar generation facilities interconnected  
22 with DESC's system.

1 **Matthew W. Tanner, Ph.D.**, Director of Navigant Consulting, Inc.’s (“Navigant”) Energy Practice, who will discuss the Variable Integration Cost (“VIC”) study that  
2 was prepared by Navigant on behalf of DESC.  
3

4 **Mr. John E. Folsom, Jr.** Power Marketing Manager, who will discuss the Company’s proposed form contract for the “Standard Offer” as defined by S.C. Code Ann. § 58-41-10(15), including the proposed terms and conditions. Mr.  
5 Folsom also will discuss DESC’s proposed form PPA and proposed notice of  
6 commitment to sell form. Finally, Mr. Folsom will discuss the application of  
7 DESC’s VIC to those sellers who have executed PPAs with provisions agreeing that  
8 the Company may reduce its effective avoided cost rate by a factor approved by the  
9 Commission to recover the costs associated with the variability of solar generation.  
10

11 **Mr. Allen W. Rooks**, Manager of Electric Pricing and Rate Administration, who  
12 will sponsor the Company’s rate schedules, which are being updated or proposed in  
13 connection with this proceeding.  
14  
15

#### 16 **SYSTEM OVERVIEW**

17 **Q. PLEASE DESCRIBE DESC’S ELECTRIC SYSTEM AND THE**  
18 **CUSTOMERS IT SERVES.**

19 A. DESC is engaged in the generation, transmission, distribution and sale of  
20 electricity. As such, DESC operates an integrated electric utility system that serves  
21 approximately 739,000 customers in 24 counties covering nearly 16,000 square  
22 miles in central, southern, and southwestern portions of South Carolina. DESC

1 operates 20 generating facilities with a net reliable generating capacity of 5,641  
2 megawatts (“MW”) in summer and 5,894 MW in winter.

3  
4 **ACT NO. 62**

5 **Q. ARE YOU FAMILIAR WITH ACT NO. 62, WHICH WAS ENACTED BY**  
6 **THE SOUTH CAROLINA GENERAL ASSEMBLY EARLIER THIS YEAR?**

7 A. Yes, I am familiar with this legislation and attended numerous subcommittee  
8 and full committee meetings regarding the bill while it was being discussed by the  
9 South Carolina General Assembly. Specifically, I participated in many discussions  
10 with the House Labor, Commerce, and Industry Committee and the Senate Judiciary  
11 Committee regarding various proposals and amendments that were offered for  
12 consideration by the legislature.

13  
14 **Q. DOES ACT NO. 62 APPLY TO DESC?**

15 A. Yes, it applies to all electric utilities such as DESC that are regulated by the  
16 Commission, excepting that electric utilities serving less than 100,000 customer  
17 accounts are exempt from Chapter 41 (Renewable Energy Programs) of Act No. 62.

1   **Q.    WHAT IS YOUR UNDERSTANDING AS TO THE PURPOSE AND PUBLIC**  
2   **POLICY BEHIND ACT NO. 62?**

3   A.       I believe the purpose for Act No. 62 and the underlying public policy behind  
4   the legislation is most clearly reflected in Section 58-41-05 of the act, which states  
5   as follows:

6           The commission is directed to address all renewable energy issues in  
7   a **fair and balanced manner, considering the costs and benefits to**  
8   **all customers** of all programs and tariffs that relate to renewable  
9   energy and energy storage, both as part of the utility's power system  
10   and as direct investments by customers for their own energy needs  
11   and renewable goals. The commission also is directed to ensure that  
12   the revenue recovery, cost allocation, and rate design of utilities that  
13   it regulates are **just and reasonable** and properly reflect changes in  
14   the industry as a whole, the benefits of customer renewable energy,  
15   energy efficiency, and demand response, as well as any utility or state  
16   specific impacts unique to South Carolina which are brought about by  
17   the consequences of this act. (Emphasis added.)

18           Stated differently, in enacting Act No. 62, the South Carolina General  
19   Assembly encouraged the development of renewable energy resources, such as solar  
20   generation, in a manner that is fair and balanced to all customers of all programs  
21   related to renewable energy and energy storage. The General Assembly also made  
22   clear that revenue recovery, cost allocation, and rate design of utilities should be  
23   just and reasonable. Further and among other things, Act No. 62 establishes  
24   procedures to ensure that independent power producers are properly compensated  
25   for the energy they produce, as is required by PURPA, while at the same time  
26   mandating that costs not be shifted onto utility customers in an effort to subsidize  
27   such programs. Act No. 62 is designed to ensure that the Company determines its

1 costs and sets its rates at just and reasonable levels to comply with the legislative  
2 requirements and to implement the programs required by the act, while also  
3 preventing the unfair and unnecessary shifting of costs to customers, including those  
4 customers who elect not to participate in certain of the optional programs such as  
5 Net Energy Metering or Community Solar.

6  
7 **Q. WHAT DOES ACT NO. 62 REQUIRE AS IT PERTAINS TO THIS**  
8 **PROCEEDING?**

9 A. The matters which are required to be addressed in the instant proceeding are  
10 set forth in Section 58-41-20 of the act. Specifically, Section 58-41-20(A) required  
11 the Commission to open the instant docket for the purposes of establishing each  
12 electrical utility's: 1) Standard Offer; 2) avoided cost methodologies; 3) form  
13 contract power purchase agreements, as that term is defined by 58-41-10(9); 4)  
14 commitment to sell forms; and 5) any other terms and conditions necessary to  
15 implement this section.

16  
17 **Q. WHAT DOES ACT NO. 62 REQUIRE OF ELECTRIC UTILITIES**  
18 **REGARDING THE ESTABLISHMENT OF AVOIDED COSTS?**

19 A. With respect to avoided costs, the goal of Act No. 62 is to establish  
20 methodologies for each electric utility that accurately determine the costs the utility  
21 avoids as a result of purchases it makes from a qualifying facility or facilities  
22 ("QFs") under PURPA. It is important to note that, in making this determination,

DESC is not incentivized to understate or overstate its avoided costs because customers pay through fuel rates any costs not borne by a solar developer. Rather, the Company's objective is to accurately calculate its avoided costs that are paid to QFs, including independent solar power producers, so that customers are not adversely impacted by, and will be economically indifferent to, these power purchases instead of the Company incurring cost to generate energy using its current generation fleet or to construct and operate additions to utility power plant. In like manner, Act No. 62 does not establish and is not designed to provide additional benefits or incentives for solar generating facilities, other than the payment of the utility's avoided cost. In doing so, the goal of Act No. 62, as well as DESC, is to ensure that excess costs are not shifted to or borne by utility customers, but result in power purchase transactions that are revenue neutral to the ratepayers. In contrast, solar generating facilities are directly motivated to request that avoided costs be set as high as possible and above the actual level of a utility's avoided costs, since this would reward them with additional revenue, but at the expense of requiring utility customers to pay excessive rates.



**STANDARD OFFER**

**Q. WHAT IS A STANDARD OFFER?**

A. A Standard Offer is defined by S.C. Code Ann. § 58-41-10(15) to mean “the avoided cost rates, power purchase agreement, and terms and conditions approved by the commission and applicable to purchases of energy and capacity by electrical utilities ... from small power producers up to two megawatts AC in size.” Stated differently, a Standard Offer is a contract that contains an avoided cost rate paid to eligible QFs that are 2 MW in size or smaller. Additionally, the Standard Offer contract sets the terms and conditions and allows any qualifying small power producer, as defined by Section 58-41-10(14), to contract with the utility to supply electricity at established rates without the need to negotiate individual contracts.

**Q. HAS THE COMPANY PROPOSED A STANDARD OFFER IN THIS MATTER?**

A. Yes. As reflected in Exhibit No. \_\_ (JEF-2) to the direct testimony of Company Witness Folsom, the Company is proposing a form Standard Offer agreement as required by Section 58-41-20. This Standard Offer agreement will be the PPA for small power producers up to 2 MW in size and will establish the rates, as well as the terms and conditions, for these purchases of energy and capacity by DESC. The Standard Offer also provides the published avoided cost rates at which the Company would pay the QF for the delivered energy and capacity, which are based on the avoided cost methodologies approved by the Commission.

**AVOIDED COSTS**

**Q. WHAT ARE AVOIDED COSTS?**

A. Both PURPA regulations and South Carolina statutes define “avoided costs” as “the incremental costs to an electric utility of electric energy or capacity or both which, but for the purchase from [QFs], such utility would generate itself or purchase from another source.” 18 C.F.R. § 292.101(b)(6); S.C. Code Ann. § 58-41-10(2). The Federal Energy Regulatory Commission (“FERC”) further recognizes that avoided costs include two components: “energy” and “capacity.” Specifically, “[e]nergy costs are the variable costs associated with the production of electric energy (kilowatt-hours). They represent the cost of fuel, and some operating and maintenance expenses. Capacity costs are the costs associated with providing the capability to deliver energy; they consist primarily of the capital costs of facilities.” *Small Power Production and Cogeneration Facilities; Regulations Implementing Section 210 of the Public Utility Regulatory Policies Act of 1978*, Order No. 69, 45 Fed. Reg. 12,214, 12,216 (Feb. 25, 1980) (“Order No. 69”).

**Q. DOES PURPA REQUIRE UTILITIES TO PAY QFs MORE THAN THEIR INCREMENTAL COSTS OF ENERGY OR CAPACITY WHICH, BUT FOR THE QF PURCHASE, THE UTILITY WOULD GENERATE ITSELF OR PURCHASE FROM ANOTHER SOURCE?**

A. No. In fact, PURPA specifically provides that “[n]o ... rule ... [regarding the sale and purchase of QF power] shall provide for a rate which exceeds the

1 incremental cost to the electric utility of alternative electric energy.” 16 U.S.C.A.  
2 § 824a-3(b). PURPA’s implementing regulations also expressly provide that  
3 “[n]othing ... requires any electric utility to pay more than the avoided costs for  
4 purchases” from QFs. 18 C.F.R. § 292.304(a)(2). Similarly, by setting a ceiling of  
5 incremental cost on the amount a utility should be required to pay for a QF's power,  
6 Congress expressed that PURPA is “not intended to require the rate payers of a  
7 utility to subsidize cogenerators or small power products.” Joint Conference  
8 Committee Report, H.R.Rep. No. 95–1750, at 98, 1978 U.S.C.C.A.N. 7797, 7832.  
9

10 **Q. HOW DO AVOIDED COSTS IMPACT CUSTOMERS?**

11 A. In Order No. 81-214 and subsequent decisions, the Commission has  
12 recognized that utilities are entitled to recover from customers their avoided costs  
13 under PURPA. PURPA is intended to equalize the rate charges for utility power  
14 plant additions and utility purchases of QF power so as to make certain that  
15 customers do not pay more for electricity under either option. In this same manner,  
16 Section 58-41-20(A) of Act No. 62 further provides that “[a]ny decisions by the  
17 commission shall be just and reasonable to the ratepayers of the electrical utility ...  
18 and shall strive to reduce the risk placed on the using and consuming public.” Thus,  
19 if a utility’s avoided costs are calculated correctly and accurately reflect the utility’s  
20 avoided costs, customers would not be impacted by, and would be economically  
21 indifferent to, purchases of QF power instead of the cost to construct and operate

1 additions to utility power plant. Likewise, the solar generator is able to secure a non-  
2 discriminatory rate equal to DESC's avoided costs to which they are entitled.

3 It therefore is clear from PURPA and Act No. 62 that utilities are only  
4 required to pay QFs the utility's avoided costs, and nothing more. To do otherwise  
5 would require customers to improperly subsidize these privately held solar projects.  
6 Such an outcome would be at odds with the requirements set forth in S.C. Code  
7 Ann. § 58-41-20(A).

8 Because ratepayers pay for all QF power purchased by DESC, the Company  
9 has no incentive to overstate or understate its avoided costs. However, solar QFs do  
10 have an incentive to overstate avoided costs so that they will receive more  
11 compensation for the energy sold to the utilities than otherwise would be required.  
12 Simply stated, higher avoided costs paid to QFs mean higher purchased power costs,  
13 and thus higher fuel rates, paid by customers. The Company therefore carefully  
14 calculates its avoided costs so that customers are not required to subsidize QFs  
15 through the payment of excessive rates and, instead, are economically indifferent to  
16 the purchases, as is intended by PURPA and Act No. 62.

17  
18 **Q. DOES DESC PURCHASE ELECTRICITY GENERATED BY**  
19 **INDEPENDENTLY OWNED SOLAR FACILITIES?**

20 A. Yes. PURPA and its implementing regulations require DESC to purchase  
21 electric energy from QFs, but only at the Company's avoided costs.

1 **Q. HAS THE COMPANY EXPERIENCED A RECENT INCREASE IN THE**  
2 **AMOUNT OF UTILITY-SCALE SOLAR FACILITIES**  
3 **INTERCONNECTED WITH ITS SYSTEM?**

4 A. Yes. As of August 8, 2019, 31 utility-scale solar facilities have  
5 interconnected with DESC's system which represent approximately 498 MW of  
6 solar generation. In addition, 14 utility-scale projects, totaling approximately 713  
7 MW, have executed an interconnection agreement, a PPA, or both. There also are  
8 58 projects in the interconnection queue, representing approximately 4,178 MW of  
9 additional solar generation.<sup>2</sup> In total, approximately 5,389 MW of solar generation  
10 is either online or has taken steps to supply power to the DESC system in the near  
11 future. By comparison, the entire DESC generation fleet represents only 5,641 MW  
12 of generating capacity in summer and 5,894 in winter.

13  
14 **Q. HOW DOES THE AMOUNT OF SOLAR CURRENTLY**  
15 **INTERCONNECTED WITH DESC'S SYSTEM OR SUBJECT TO AN**  
16 **INTERCONNECTION AGREEMENT COMPARE TO THAT OF OTHER**  
17 **UTILITIES?**

18 A. According to the Smart Electric Power Alliance ("SEPA"), of 494 utilities  
19 across the United States, DESC installed the 11th highest amount of solar in 2018,  
20 ranking only behind Pacific Gas & Electric (California), Florida Power & Light Co.

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<sup>2</sup> In addition, a project totaling approximately 75 MW is pending reinstatement in the queue.

1 (Florida), Southern California Edison (California), Duke Energy Progress (North  
2 Carolina), Xcel Energy (Minnesota), Dominion Energy North Carolina (North  
3 Carolina), Austin Energy (Texas), San Diego Gas & Electric (California), Tampa  
4 Electric Company (Florida), and Georgetown Utility Systems (Texas). Equally  
5 impressive, the amount of solar that DESC has interconnected as of July 31, 2019,  
6 is over 598 MW, or approximately 14% of its 2014-2018 five-year average retail  
7 peak demand (4,291 MW). DESC also has another 475 MW under contract and to  
8 be installed by the end of 2021, which will put the Company over 25% of its 2014-  
9 2018 five-year average retail peak demand.

10 In addition, according to the Energy Information Administration's Form  
11 EIA-861, through 2018, the state of South Carolina has more net energy metering  
12 installations than the combined total of North Carolina, Georgia, Kentucky,  
13 Tennessee, Alabama, and Mississippi (115 MW). In fact, with approximately 172  
14 MW of net energy metering installations as of December 31, 2018, South Carolina  
15 has almost twice as much as North Carolina's 89 MW of installations.

16  
17 **Q. IS THE COMPANY APPROACHING OPERATIONAL LIMITS ON THE**  
18 **AMOUNT OF SOLAR GENERATION THAT IT CAN REASONABLY**  
19 **INTERCONNECT TO ITS CURRENT SYSTEM?**

20 **A.** Yes. As further described by Company Witness Bell, as more solar QF  
21 facilities are interconnected, the more difficult it becomes for the Company to  
22 integrate the power supplied, which creates additional operational costs. Without

1 additional energy storage resources or capital improvements enabling existing  
2 plants to operate at lower minimum generation levels, DESC will be unable to  
3 accommodate the 5,389 MW of solar that is anticipated to be installed on its system  
4 because it exceeds DESC's system load. As a result, these solar facilities will need  
5 to have their energy output curtailed at many times.

6  
7 **Q. WHY IS THAT THE CASE?**

8 A. As Company Witnesses Lynch and Bell discuss further in their testimonies,  
9 DESC faces a number of difficulties in handling additional solar generation. First,  
10 solar power does not help to serve the system's winter peaking needs because the  
11 system typically peaks early in the morning before sunrise. Additionally, for most  
12 non-summer days the system load peaks either before sunrise or after sunset, and  
13 thus solar provides little or no support for serving these peaks. As the amount of  
14 solar capacity increases, each increment of solar capacity affects the peak on fewer  
15 days because, as more solar capacity is added, the time of the system peak, net of  
16 the solar output, is shifted later in the day until a time when adding more solar no  
17 longer affects the peak at all.

18 In addition, solar generation is a variable energy resource, meaning that its  
19 generation cannot be accurately forecasted, but is a product of uncontrollable factors  
20 such as available sunlight and cloud cover. For this reason, a solar facility's output  
21 is not necessarily responsive to the needs of DESC's system. Because of this  
22 variability in generation and lack of responsiveness, DESC must make operational

adjustments to follow the energy generated by solar facilities and to maintain sufficient operating reserve generation capability in order to meet system reliability requirements.

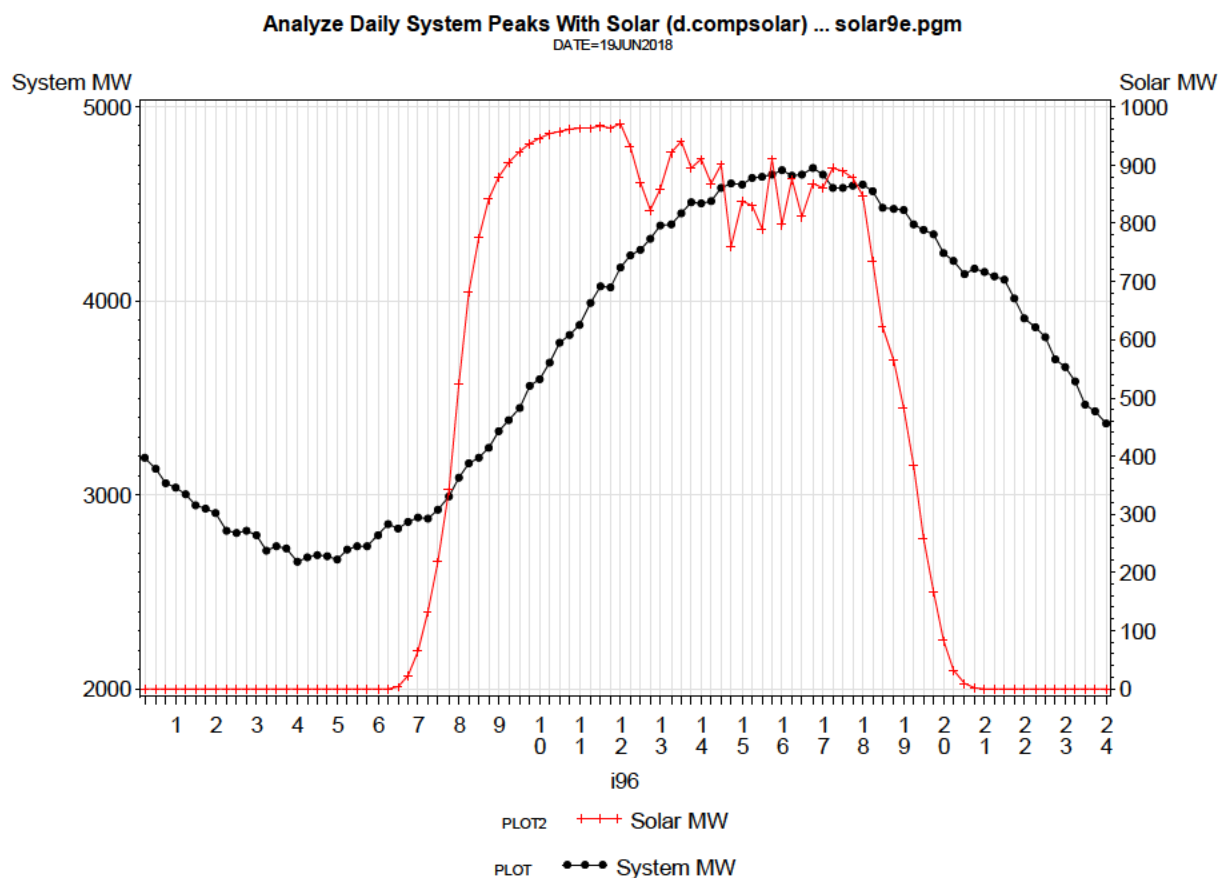
**Q. PLEASE PROVIDE EXAMPLES OF THE TYPES OF OPERATIONAL DIFFICULTIES DESC HAS EXPERIENCED AS A RESULT OF THE POWER SUPPLIED BY SOLAR GENERATING FACILITIES.**

A. As Company Witness Lynch reflects in his study included as Exhibit No. \_\_\_\_ (JML-1), DESC faces a number of difficulties in handling solar generation. I will discuss with the Commission four examples that illustrate these difficulties.



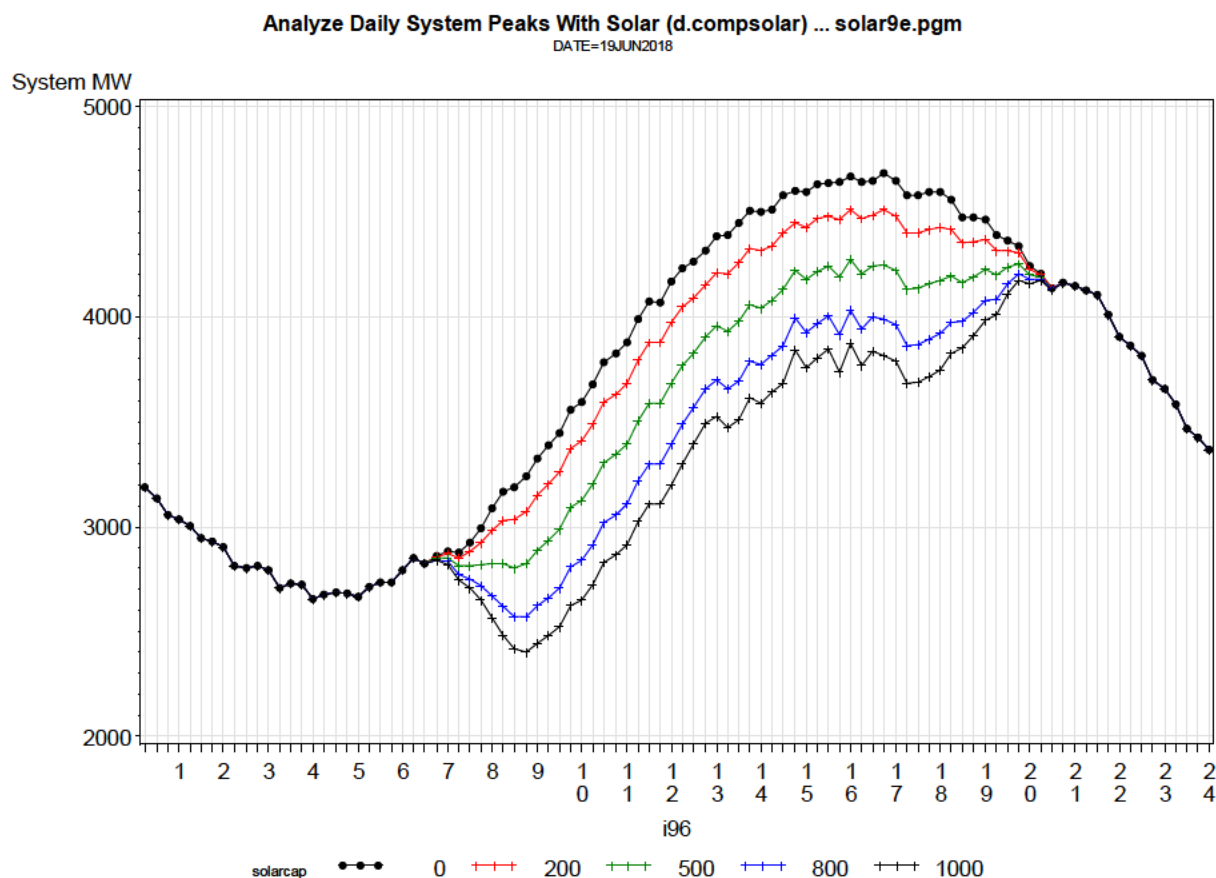
### Illustration 1: Solar Potential during the 2018 Summer Peak Day

Illustration 1, below, shows actual system demand and actual solar generation (scaled up to 1,000 MW) during DESC's summer peak demand for 2018, which occurred on June 19<sup>th</sup> of that year. As Illustration 1 shows, the timing of the peak solar generation potential and the timing of the peak in summer electrical demand are not identical. Solar displaces peak demand from midmorning to midafternoon, but drops off rapidly beginning at approximately 6:00 p.m. However, demand does not drop until later and remains high until late in the evening.



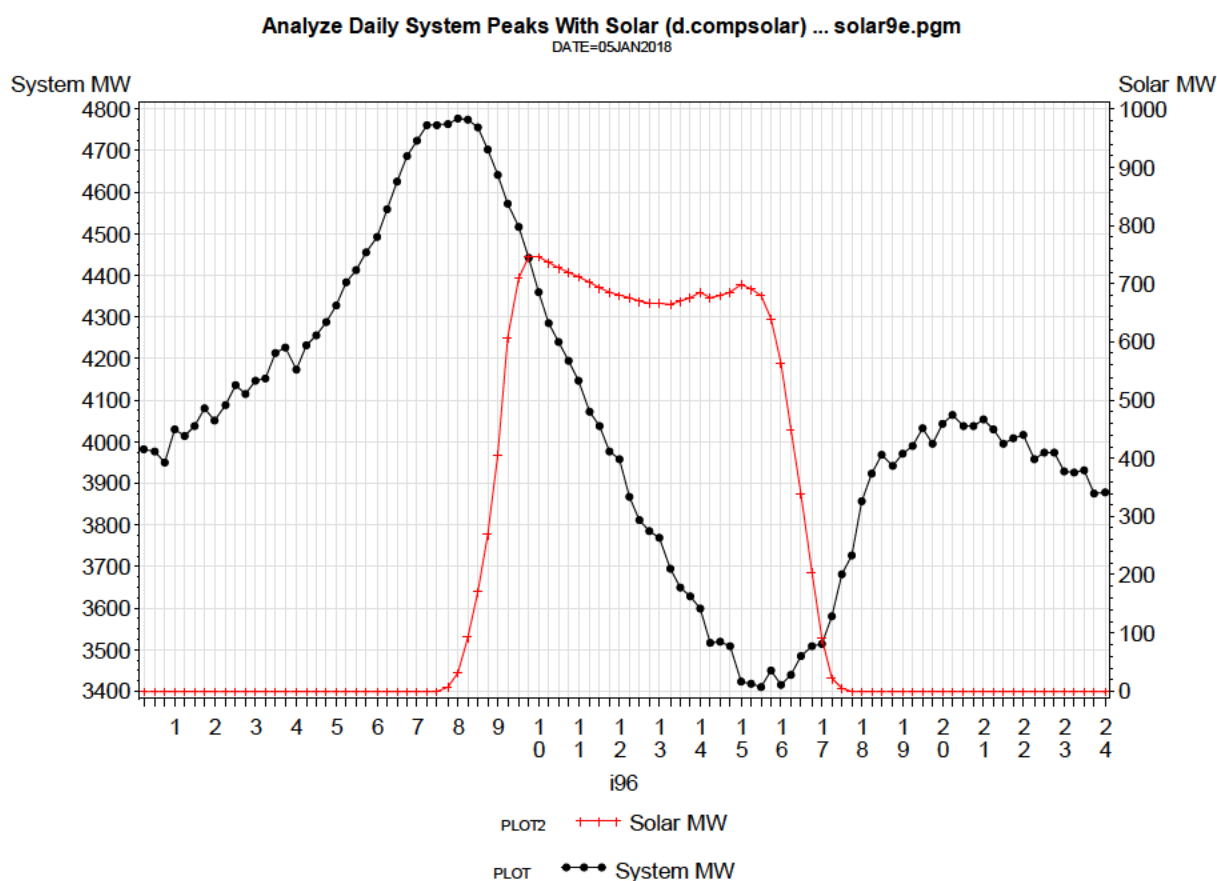
## Illustration 2: Varying Solar Potential during the 2018 Summer Peak Day

Illustration 2 below shows the system peak, net of solar generation, during the same peak day assuming DESC had varying amounts of solar generation connected to its system at the time. The amounts shown in Illustration 2 include 200 MW, 500 MW, 800 MW, and 1,000 MW of solar generation. As Illustration 2 shows, 1,000 MW of solar generation helps to reduce the Company's summer peak. However, the peak, net of solar generation, shifts from mid-afternoon to 8:00 p.m., a time when the sun has set and solar is unable to contribute any generation to the system.



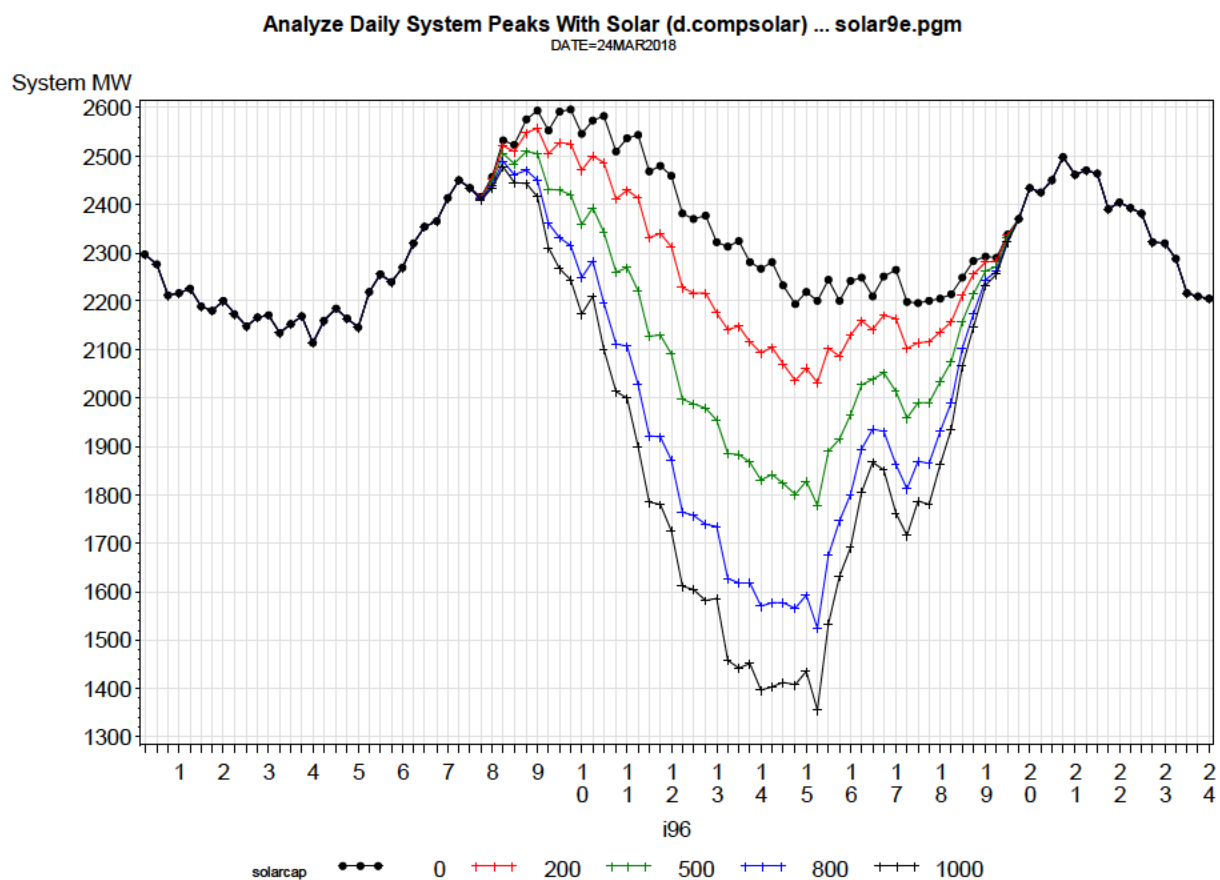
### Illustration 3: Solar Potential during the 2018 Winter Peak Day

Illustration 3 below shows solar generation as compared to the 2018 winter peak. This demonstrates that the system peak demand occurs during the early morning hours, before sunrise, and there is no solar generation at the time. Thus, any amount of solar capacity connected to the system (to include 1,000 MW) would not directly contribute to meeting winter peak demand.



#### **Illustration 4: Demand Net of Renewable Resources on a Shoulder Day**

Illustration 4 below shows the possible effect on dispatchable generation resources on a day when historical system peak demands are not reached, but significant loads are nonetheless experienced on the system. The day shown is March 24, 2018. Illustration 4 shows that, with 1,000 MW of solar generation connected to the system, the demand to be met from non-solar resources would swing from approximately 2,600 MW at 10:00 am, to approximately 1,400 MW at 3:00 pm and back to approximately 2,500 MW at 9:00 pm. This presents significant operating challenges as the Company's system experiences steep ramping up and down, while simultaneously being required to maintain sufficient generation reserves online during new daytime minimum loads in order to serve the evening peaks when solar is unavailable. If the solar generation combined with the generation reserves is more than the daytime minimum load (in the example 1,400 MW at 3:00 pm), DESC's System Control would likely need to curtail the solar generation output in order to balance the system and have sufficient generation to meet the evening peak of 2,500 MW at 9:00 pm.



1

1 **Q. WHAT IMPACT DO THESE ISSUES HAVE ON DESC'S AVOIDED**  
2 **COSTS?**

3 A. As more and more solar is added to DESC's system, the value of each  
4 additional increment of solar is reduced. The additional energy from solar  
5 generation also causes the system to experience decreasing minimum loads between  
6 the morning and evening peaks. This creates operational problems in running the  
7 system as system operators have to select resources that can follow the load. Thus,  
8 while solar energy coming onto the system has value, it also causes operational  
9 challenges that must be reflected in the calculation of avoided costs. Because DESC  
10 currently has over 1,048 MW of solar capacity under PPAs, the addition of another  
11 100 MW of solar, which is the maximum reduction allowed by PURPA regulation  
12 18 C.F.R. § 292.302(b)(1) for utilities such as DESC, has no effect on the  
13 Company's resource plan. This is a very important point when considering capacity  
14 value, or lack thereof, in solar.

15  
16 **Q. HAS DESC DEVELOPED AN AVOIDED COST METHODOLOGY THAT**  
17 **IT IS PROPOSING THE COMMISSION ADOPT IN CONNECTION WITH**  
18 **THIS PROCEEDING?**

19 A. Yes. Company Witness Neely discusses the Company's proposed avoided  
20 cost methodology and provides the details regarding the various components and  
21 inputs into the methodology. As the Commission is aware, the base methodology,  
22 which is reflected in the rate schedules sponsored by Company Witness Rooks, has

been reviewed and approved by the Commission for many years. And, as required by Section 58-41-20(B)(3), this methodology fairly and reasonably accounts for costs avoided or incurred by the Company, including, but not limited to, energy, capacity, and ancillary services provided by or consumed by small power producers including those utilizing energy storage equipment. This methodology also ensures that rates for the purchase of energy and capacity fully and accurately reflect DESC's avoided costs as required by Section 58-41-20(B)(2).

# POWER PURCHASE AGREEMENT

1 **Q. HAS THE COMPANY PROPOSED A FORM CONTRACT PPA IN THIS**  
2 **DOCKET?**

3 A. Yes. Exhibit No. \_\_\_\_ (JEF-1) to the direct testimony of Company Witness  
4 Folsom sets forth the Company's proposed form contract PPA. As required by S.C.  
5 Code Ann. § 58-42-20(A), this proposed agreement includes provisions for force  
6 majeure, indemnification, choice of venue, confidentiality provisions, and other  
7 such terms. The proposed PPA does not include a price or establish a duration for  
8 the term of the agreement; rather, these issues will be separately negotiated by the  
9 Company and the applicable QF.

10  
11 **Q. ARE ELIGIBLE QFs REQUIRED TO ENTER INTO THE FORM PPA**  
12 **APPROVED BY THE COMMISSION?**

13 A. No. In fact, Section 58-41-20(A) specifically provides that nothing in that  
14 section restricts "the right of parties to enter into [PPAs] with terms that differ from  
15 the commission-approved form(s)." Accordingly, if a QF wishes terms that differ  
16 from the form PPA as approved by the Commission, they are free to discuss  
17 different provisions with the Company. And while the Company is not obligated to  
18 accept terms that differ from the form PPA, DESC would give consideration to any  
19 request made for a PPA with different provisions than those that are included in the  
20 form approval by the Commission.



1 **Q. HOW DOES DESC PROPOSE TO ADDRESS THE PPAs WITH CERTAIN**  
2 **SMALL POWER PRODUCTION FACILITIES THAT HAVE ACTIVE**  
3 **INTERCONNECTION REQUESTS ON FILE WITH THE COMPANY**  
4 **PRIOR TO THE EFFECTIVE DATE OF THE ACT?**

5 A. Pursuant to Section 58-41-20(F)(1), electrical utilities are required to offer  
6 fixed PPAs to those small power producers that have active interconnection requests  
7 on file with the Company prior to the effective date of Act No. 62, which was May  
8 16, 2019. DESC proposes to use the Form PPA for these transactions, but for a  
9 duration of ten years. If the small power producer proposes to provide less than 2  
10 MW, they will receive the Standard Offer. The avoided cost rates applicable to these  
11 PPAs are based on the avoided cost methodology proposed by DESC in this  
12 proceeding.

13  
14 **NOTICE OF COMMITMENT TO SELL FORM**

15 **Q. WHAT IS A COMMITMENT TO SELL FORM?**

16 A. Also known as a “Notice of Commitment to Sell,” this is a form that can be  
17 delivered by the small power producer who is prepared to make a substantial  
18 commitment to sell its output to the electrical utility, thereby securing its right to  
19 sell the output of its facility at the avoided cost rates and pursuant to the PPA then  
20 in effect. Pursuant to Section 58-41-20(D), the Commission must approve a standard  
21 notice of commitment to sell form that provides the small power producer a  
22 reasonable period of time from its submittal of the form to execute a PPA.

1 **Q. HAS DESC PROPOSED A NOTICE OF COMMITMENT TO SELL FORM**  
2 **AS PART OF THIS PROCEEDING?**

3 A. Yes. Exhibit No. \_\_\_\_ (JEF-3) to the direct testimony of Company Witness  
4 Folsom sets forth the Company's proposed Notice of Commitment to Sell form.  
5

6 **OTHER TERMS AND CONDITIONS**

7 **Q. ARE THERE OTHER TERMS AND CONDITIONS RELEVANT TO THIS**  
8 **DOCKET THAT DESC IS PROPOSING BE APPROVED BY THE**  
9 **COMMISSION?**

10 A. Not at this time, but the Company reserves the right to make additional  
11 proposals in rebuttal testimony if deemed appropriate.  
12

13 **BIFURCATION OF ISSUES IN 2019 FUEL DOCKET**

14 **Q. ARE YOU FAMILIAR WITH THIS COMMISSION'S DECISION**  
15 **BIFURCATING THE PROCEEDINGS IN DOCKET NO. 2019-2-E?**

16 A. Yes. In Order No. 2019-43-H, the Commission determined that issues  
17 pertaining to avoided costs, variable integration costs, and updates to the values  
18 included in the NEM methodology should be bifurcated from DESC's fuel cost  
19 proceeding held in April 2019. The Commission held these issues in abeyance and  
20 ordered that, once these values were established, there would be a "true-up" of these  
21 amounts.  
22

1 **Q. HOW DOES THE COMPANY PROPOSE TO IMPLEMENT THE “TRUE**  
2 **UP” CONTEMPLATED BY ORDER NO. 2019-43-H?**

3 A. As discussed by Company Witness Rooks, as part of the 2019-2-E fuel cost  
4 proceeding, DESC proposed to include the updated avoided costs, variable  
5 integration costs, and updates to the NEM values in its fuel costs effective with the  
6 first billing cycle of May 2019. Based upon the Commission’s ruling on DESC’s  
7 updated avoided costs, variable integration costs, and NEM methodology in this  
8 proceeding, DESC proposes to calculate the difference between those costs and  
9 values and separately account for them as incremental costs. The Company would  
10 further propose to adjust its fuel costs as part of its 2020-2-E annual fuel cost review  
11 proceeding to account for these incremental costs. By adjusting the Company’s fuel  
12 costs in this manner, customers will not experience any immediate impact, and these  
13 amounts will be appropriately accounted for and “trued up” as contemplated by the  
14 Commission in Order No. 2019-43-H.

15  
16 **CONCLUSION**

17 **Q. WHAT IS DESC REQUESTING OF THE COMMISSION IN THIS**  
18 **PROCEEDING?**

19 A. DESC respectfully requests that the Commission approve the Company’s  
20 proposed Standard Offer, form contract PPA, form Notice of Commitment to Sell  
21 form, the other terms and conditions proposed by DESC, and the Company’s  
22 proposed methodology to calculate avoided costs. DESC also requests that the

1 Commission find the Company's proposals to be consistent with the requirements  
2 of Act No. 62, fair and reasonable and in the public interest, and properly reflects  
3 the Company's avoided costs so that customers are not burdened with subsidizing  
4 developers of solar generators. Finally, the Company requests that it be authorized  
5 to separately account as an incremental cost the differences in its NEM values,  
6 which were stayed pursuant to Order No. 2019-274 and be allowed to seek an  
7 appropriate adjustment for the differences in these costs and values in its 2020-2-E  
8 annual fuel cost review proceeding.

9 .  
10 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

11 **A. Yes.**